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## ABSTRACT OF THE DISCLOSURE

## METHOD AND APPARATUS FOR ENHANCING CORRECTION POWER OF REVERSE ORDER ERROR CORRECTION CODES

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An improved error correction code process takes advantage of information available from a post processor. This information is a list of highly probable error event patterns and locations found by employing a list Viterbi or a set of matched filters on Viterbi data. This list of possible errors can be used by the error correction code decoder in an iterative process whenever the correction power of the error correction code decoder is exceeded. If the error correction code decoder cannot correct the data on its first unassisted try, an iterative process is employed which, in essence, modifies the data with potential errors identified from the list created by the post processor and tries the correction process over again. An algorithm may be employed to try each error singly or in combination with other errors. This iterative process continues until a correctable indication is given by the error correction code decoder algorithm. The data is then corrected with the error correction code decoder results and the corresponding error list.

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